

Name: _____ TP: _____

Failure to show all work and write in complete sentences will result in LaSalle.

1) Summarize all of area and perimeter formulas for all the basic figures we have studied. Include a sketch of the figure.

Square ①
 Rectangle ②
 Rectangle ③
 Rectangle ④
 Circle ⑤
 Circle ⑥
 Triangle ⑦

ACT Practice!

1)

The length of a rectangle is 3 times its width. The area of the rectangle is 48 square inches. What is the width, in feet, of the rectangle?

F. 4
G. 8
H. 12
J. 16
K. 22

$L = 3 \cdot W$
 $A = 48 \text{ in.}^2$
 $A = L \cdot W$

2)

The circumference of a circle is 24π inches. What is the area of the circle?

A. 12π square inches
B. 24π square inches
C. 36π square inches
D. 144π square inches
E. 576π square inches

$C = 2\pi r$ / $C = 24\pi$
 $24\pi = 2\pi r$
 $A = \pi r^2$

① Solve for r
② Solve for area

*SUBSTITUTE

3)

The area of a circle is 121π square units. What is the diameter, in units, of the circle?

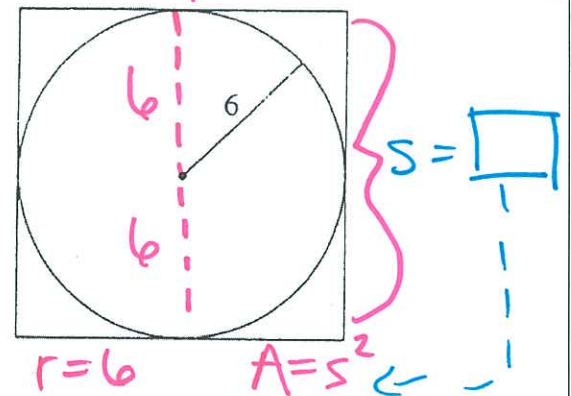
F. π
G. 11
H. 22
J. 11π
K. 121

$A = \pi r^2$
 $A = 121\pi$

① Set equal to each other.
 ② Solve for r! (remember, opposite of r^2 is $\sqrt{r^2}$.
 ③ Diameter is radius times 2.

4)

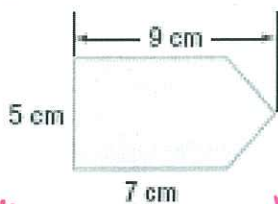
A circle of radius 6 inches is inscribed in a square, as shown below. What is the area of the square, in square inches?



- F. 36
G. 42
H. 72
J. 36π
K. 144

USE your words.

5) Describe how you would find the area of the figure shown below.

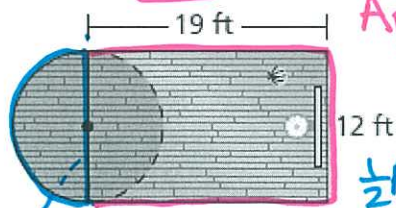


What shapes can you split this into?

① _____
② _____

Now, explain what to do with the numbers.

6) Find the area of the basketball court below.



Area: $A_{rect} :$

$\frac{1}{2}A_{circle} :$

$$r = \frac{1}{2}(12) = \square$$

Exact Answer:

Approx Answer:

Find the perimeter of the basketball court.

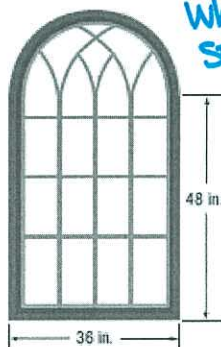
Perim: $P_{rect} :$

$\oplus \frac{1}{2}P_{circle}$

Exact Answer:

Approx Answer:

7) What is the area of the window shown?



What shapes can you split this into?

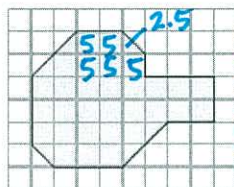
① _____
② _____

Area: $A_{rect} :$

Area: $A_{circle} :$

- A. 2,236.68 in² C. 508.68 in²
B. 1,728 in² D. 168 in²

8) The shaded part of the grid represents the plans for a fish pond.

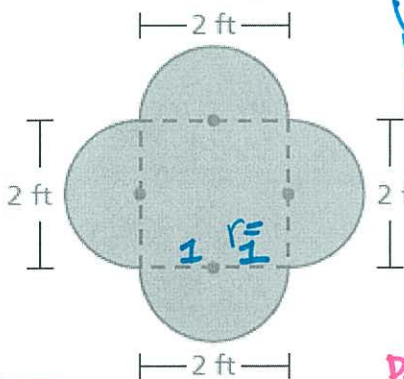


$\square = 5$
① Count each full box!
Multiply by 5.
② Count $\frac{1}{2}$ boxes!
Multiply by $\frac{1}{2}$ of 5.

If each square on the grid represents 5 square feet, what is the approximate area of the fish pond?

- F. 175 square feet
G. 165 square feet
H. 150 square feet
I. 33 square feet

9) Find the area and perimeter of the figure below.



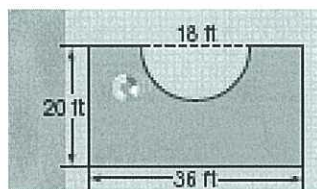
What shapes do you have?

① _____

② (4 quarter circles make 1 full circle)

Perimeter
(Is the square a part of the perimeter?)

10) The diagram below gives the dimensions of a swimming pool. If a cover is needed for the pool, what will be the area of the cover?



- Rectangle $\ominus \frac{1}{2}$ Circle
- You want to get rid of the $\frac{1}{2}$ circle

Exact Answer:

Approx Answer:

What is the perimeter of the pool?

Exact Answer:

Approx Answer:

STUDY! LOOK THROUGH YOUR NOTES AND HOMEWORK!

STAY READY.